

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
17 June 2004 (17.06.2004)

PCT

(10) International Publication Number  
**WO 2004/051829 A3**

(51) International Patent Classification<sup>7</sup>: **H05B 41/392**,  
**H02M 7/48**

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(21) International Application Number:  
**PCT/KR2003/002603**

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(22) International Filing Date:  
28 November 2003 (28.11.2003)

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO,  
CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB,  
GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,  
KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,  
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,  
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,  
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
10-2002-0075819  
2 December 2002 (02.12.2002) KR

(84) Designated States (*regional*): ARIPO patent (BW, GH,  
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,  
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,  
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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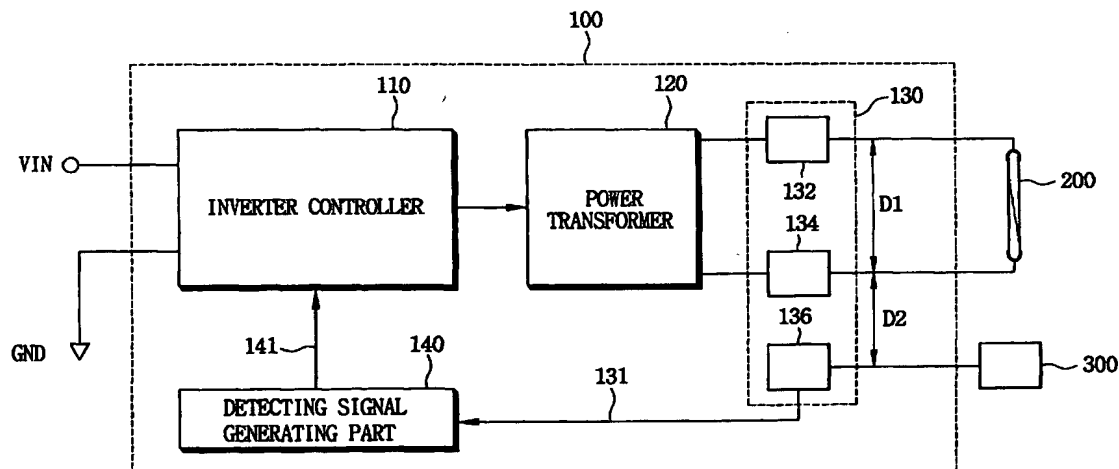
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Published:

— with international search report

[Continued on next page]

(54) Title: POWER SUPPLY APPARATUS, BACKLIGHT ASSEMBLY AND LIQUID CRYSTAL DISPLAY APPARATUS HAVING THE SAME



(57) Abstract: A power supply apparatus (100) includes an inverter controller (110), a power transforming part (120) and a connecting part (130). The power transforming part (120) converts a direct current supplied from the inverter controller (110) into an alternating current to output first and second polarity currents. The connecting part (130) outputs the first and second polarity currents to first and second end portions of a load (200) through first and second terminals (132,134), respectively and has a third terminal (136) to receive a sensed signal in response to the first or second polarity currents so as to output the sensed signal. The first terminal (132) is spaced apart from the second terminal (134) by a first insulating distance (D1), and the third terminal (136) is spaced apart from the first or second terminals (132,134) adjacent to the third terminal (136) by a second insulating distance (D2). Therefore, the sensed signal is independent of the output power, thereby increasing the sensing efficiency.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**(88) Date of publication of the international search report:**  
2 December 2004

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR 2003/002603-0

## CLASSIFICATION OF SUBJECT MATTER

IPC<sup>7</sup>: H05B 41/392, H02M 7/48

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC<sup>7</sup>: H05B 37/00; 39/00; 41/00; H02M 7/00; G09G 3/00; G02F 1/133; H01R 9/00; 11/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, EPODOC, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 9-073989 A (MURATA MANUFACTURING CO) 31 July 1997 (31.07.1997) (abstract). [online] [retrieved on 2004-09-09]. Retrieved from: EPOQUE PAJ Database	1-3,6,7,9-11,15-19,21,24,25
A	JP 2000-294390 A (HISANAGA DENKI KK) 5 February 2001 (05.02.2001) (abstract). [online] [retrieved on 2004-09-09]. Retrieved from: EPOQUE PAJ Database	1,2,6-8,15
A	JP 8-202276 A (HITACHI LTD; HITACHI ELECTRON DEVICES KK) 26 December 1996 (26.12.1996) (abstract). [online] [retrieved on 2004-09-09]. Retrieved from: EPOQUE PAJ Database	1,6,21

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

## \* Special categories of cited documents:

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„E“ earlier application or patent but published on or after the international filing date

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„&amp;“ document member of the same patent family

Date of the actual completion of the international search

14 September 2004 (14.09.2004)

Date of mailing of the international search report

22 September 2004 (22.09.2004)

Name and mailing address of the ISA/AT

Austrian Patent Office

Dresdner Straße 87, A-1200 Vienna

Facsimile No. 1/53424/535

Authorized officer

NEWRKLA I.

Telephone No. 1/53424/335

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR 2003/002603-0

The dependency of claims 14 and 20 seems to be wrong. Claim 14 should probably be dependent on claim 13 and claim 20 should probably be dependent on claim 18.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR 03/02603-0

Patent document cited in search report			Publication date	Patent family member(s)	Publication date
JP	A	20002943 90A2		none	
JP	A	8202276A 2		none	
JP	A	9073989A 2		none	